

Notice of Allowability

Application No.

09/873,316

Examiner

CHUONG T. HO

Applicant(s)

BOTH, LOUIS JACOBUS

Art Unit

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal brief 08/09/07.
2. ☒ The allowed claim(s) is/are 1,3-6,9,11-15,17-23 renumbered 1-18 respectively.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 11/12/07.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael T. Cruz on November 12, 2007.

2. The application has been amended as follows:

IN THE CLAIMS

CLAIM 1, lines 8-10, replace " interleaving of the data stored in said memory buffer, wherein said means includes means for reading and writing the data to the memory buffer in connection with said first and second de-interleaving, " by ----- interleaving of the data stored in said memory buffer, wherein said unified means includes means for reading and writing the data to the memory buffer in connection with said first and second de-interleaving, -----;

CLAIM 1, lines 11-14, replace " wherein said means applies a first portion of a second de-interleaving pattern as data is written to the memory buffer, and wherein said means applies a second portion of said second de-interleaving pattern as data is read from the memory buffer " by ---- wherein said unified means applies a first portion of a second de-interleaving pattern as data is written to the memory buffer, and wherein said unified

means applies a second portion of said second de-interleaving pattern as data is read from the memory buffer ----;

CLAIM 3, lines 1-2, replace " wherein said means performs said first de-interleaving as the stored data is read from said memory buffer " by ---- wherein said unified means performs said first de-interleaving as the stored data is read from said memory buffer --;

CLAIM 4, lines 1-2, replace "wherein the data comprises radio frames and said means causes said radio frames to be stored in said radio frame blocks" by --- wherein the data comprises radio frames and said unified means causes said radio frames to be stored in said radio frame blocks ----;

CLAIM 5, lines 4-5, replace " and said means causes said physical channel frames to be stored in said physical channel blocks" by --- and said unified means causes said physical channel frames to be stored in said physical channel blocks ---;

CLAIM 6, lines 8-10, replace " means, coupled to said memory buffer, for performing a first and second de-interleaving of the data, wherein said means includes means for reading and writing the data to the memory buffer in connection with said first and second de-interleaving, " by ---- means, coupled to said memory buffer, for performing a first and second de-interleaving of the data, wherein said performing means includes means for reading and writing the data to the memory buffer in connection with said first and second de-interleaving, ---;

CLAIM 6, lines 11-14, replace " wherein said means applies a first portion of a second de-interleaving pattern as the data is written into the memory buffer, wherein said means applies a second portion of said second de-interleaving pattern as the data is

read from the memory buffer, and " by --- wherein said performing means applies a first portion of a second de-interleaving pattern as the data is written into the memory buffer, wherein performing said means applies a second portion of said second de-interleaving pattern as the data is read from the memory buffer, and ---;

CLAIM 9, line 6, replace " a read / write unit, coupled to said memory buffer, wherein said read / write unit is " by ---- a read / write unit coupled to said memory buffer, wherein said read / write unit is ---;

CLAIM 15, lines 8-10, replace "means, coupled to said memory buffer, for performing a first and second de-interleaving of the data stored in said memory buffer, wherein said means includes means for reading and writing the data to the memory buffer in connection with said first and second de-interleaving" by --- means, coupled to said memory buffer, for performing a first and second de-interleaving of the data stored in said memory buffer, wherein said performing means includes means for reading and writing the data to the memory buffer in connection with said first and second de-interleaving ---;

CLAIM 15, lines 11-13, replace "wherein said means performing a first portion of said second de-interleaving as the data is written into the memory buffer and said means performing a second portion of said second de-interleaving and said first de-interleaving as the written data is read from said memory buffer" by --- wherein said performing means performing a first portion of said second de-interleaving as the data is written into the memory buffer and said performing means performing a second portion of said

second de-interleaving and said first de-interleaving as the written data is read from said memory buffer ---;

CLAIM 17, lines 1-2, replace "wherein said means performs said first de-interleaving as the written data is read from said memory buffer " by -- wherein said performing means performs said first de-interleaving as the written data is read from said memory buffer ---;

CLAIM 19, lines 1-3, replace "wherein said means can de-interleave data from eight radio frames while a ninth radio frame is being received" by --- wherein said performing means can de-interleave data from eight radio frames while a ninth radio frame is being received ---;

Specification

The disclosure is objected to because of the following informalities: On the page 1, under section "Cross-Reference to Related Applications", the cited copending applications should be updated with current statuses such as U.S. Patent Application Serial No., the filing date, U.S. Patent No., and the issued date.

Allowable Subject Matter

3. Claims 1, 3-6, 9, 11-15, 17-23 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art (6,624,767, 6971057) of record does not appear to teach or render obvious the claimed limitations in combinations with the specific added limitations, as recited from independent claim 1: "wherein said unified means applies a first portion of a second de-interleaving pattern as data is written to the memory buffer, and wherein said unified

means applies a second portion of said second de-interleaving pattern as data is read from the memory buffer”.

The following is an examiner’s statement of reasons for allowance: the prior art (6,624,767, 6971057) of record does not appear to teach or render obvious the claimed limitations in combinations with the specific added limitations, as recited from independent claim 6: “wherein said performing means applies a first portion of a second de-interleaving pattern as the data is written into the memory buffer, wherein said performing means applies a second portion of said second de-interleaving pattern as the data is read from the memory buffer”.

The following is an examiner’s statement of reasons for allowance: the prior art (6,624,767, 6971057) of record does not appear to teach or render obvious the claimed limitations in combinations with the specific added limitations, as recited from independent claim 9: “wherein the read / write unit applies a first portion of a second de-interleaving pattern as the data is written to the memory buffer, wherein the read / written unit applies a second portion of said second de-interleaving pattern as the data is read from the memory buffer”.

The following is an examiner’s statement of reasons for allowance: the prior art (6,624,767, 6971057) of record does not appear to teach or render obvious the claimed limitations in combinations with the specific added limitations, as recited from independent claim 11: “applying a first portion of a second de-interleaving pattern as the data is written into the memory buffer, the data being written into a rectangular matrix;

applying a second portion of said second de-interleaving pattern as the data is read from the memory buffer “;

The following is an examiner's statement of reasons for allowance: the prior art (6,624,767, 6971057) of record does not appear to teach or render obvious the claimed limitations in combinations with the specific added limitations, as recited from independent claim 13: “writing said data to said memory buffer to effectively perform a first portion of a second de-interleaving pattern; wherein said reading effectively perform a second portion of a second de-interleaving pattern and a first de-interleaving pattern”;

The following is an examiner's statement of reasons for allowance: the prior art (6,624,767, 6971057) of record does not appear to teach or render obvious the claimed limitations in combinations with the specific added limitations, as recited from independent claim 15: “wherein said performing means performs a first portion of said second de-interleaving as the data is written into the memory buffer and said performing means performs a second portion of said second de-interleaving and said first de-interleaving as the written data is read from said memory buffer ”.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG T. HO whose telephone number is (571) 272-3133. The examiner can normally be reached on 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ORGAD EDAN can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

11/12/07

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SUPERVISORY PATENT EXAMINER

Edan Orgad 11/13/07